REMARKS

Claim 31 stands rejected under 35 U.S.C. §112, first paragraph because the claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to make or use the invention. As will be shown below, one reasonably skilled in the art could make the invention from the disclosure coupled with information known in the art without undue experimentation. Claim 31 is therefore patentable and should be allowed. Applicants respectfully request reconsideration of claim 31.

Claims 27-29 stand rejected under 35 U.S.C § 112, second paragraph, for being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As will be shown below, Applicants have amended claims 27-29 to cure the rejections under 35 U.S.C. § 112. Applicants respectfully request reconsideration of claims 27-29.

Claims 1-14, 17-20, 23-26, and 31-32 stand rejected under 35 U.S.C § 102(e) as being anticipated by Farris (U.S. Patent No. 6,122,357)(hereafter "Farris"). As will be shown below, Farris does not anticipate specifying telephone services for a particular caller, informing a callee of a caller identity, controlling caller identification, or controlling a call as claimed in the present application. Claims 1-14, 17-20, 23-26, and 31-32 are therefore patentable and should be allowed. Applicants respectfully traverse each rejection individually below and request reconsideration of claims 1-14, 17-20, 23-26, and 31-32.

Claims 15-16, 21-22, and 27-28 stand rejected for obviousness under 35 U.S.C § 103(a) as being unpatentable over Farris, in view of Rozenblit (U.S. Patent No. 5,832,072) (hereafter "Rozenblit"). As will be shown below, neither Farris nor Rozenblit, either alone or in combination, teaches or suggests a method, system, or computer program product for informing a callee of a caller identity as claimed in the present application. Claims 15-16, 21-22, and 27-28 are therefore patentable and should be allowed.

Applicants respectfully traverse each rejection individually and request reconsideration of claims 15-16, 21-22, and 27-28.

Claim 31 Recites Subject Matter That Enables One Skilled In The Art To Make Or Use The Invention Within The Meaning Of 35 U.S.C. §112, First Paragraph

Claim 31 stands rejected under 35 U.S.C. § 112, first paragraph, because "the claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." The Office Action states:

> The claim recites of individual at a calling telephony device is informed of the identity of the caller, but the specification discloses that only callee is informed of authenticated identity of caller.

That is, the Office Action takes the position that 'an individual with access to said telephony device' as claimed in the present application is not enabled because the claim language is not recited verbatim in the specification. The test for enablement is not whether claim language is recited verbatim in the specification. Instead, the test of enablement as stated in *United States v. Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) "... is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." See also, M.P.E.P. § 2164.01, and *In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir.1988). Although the claim language, 'an individual with access to said telephony device' is not recited verbatim in the specification, one reasonably skilled in the art could make or use the invention of claim 31 from the disclosure coupled with information known in the art without undue experimentation because it was well-known to everyone of skill in the art at the time this invention was made that an individual can have access to a telephony device. Furthermore, as mentioned in *In re Benno,* 768 F.2d 1340, 1346, 226 USPQ 683, 686-87 (Fed. Cir. 1985), original claims are part of an applicant's specification, and as such, it cannot be said that 'an individual with access to said telephony device' as recited in claim

31 is not disclosed in Applicant's specification. Applicants respectfully submit therefore, that because one reasonably skilled in the art could make or use the invention of claim 31, and because claim 31, as part of the specification, discloses 'an individual with access to said telephony device,' claim 31 satisfies the enablement requirement under 35 U.S.C. § 112, first paragraph. Applicants request that the rejection under 35 U.S.C. § 112 be withdrawn and the claim be allowed.

Claims 27-29 Are Amended To Cure Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 27-29 stand rejected under 35 U.S.C § 112, second paragraph, for being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated, "Claims 27, 28, 29 recite the limitation 'The computer program product' in claim 20. There is insufficient antecedent basis for this limitation in the claim." These failures of antecedent basis stem from a minor clerical error in which the original application incorrectly recited dependencies on claim 20 for claims 27-29. Applicants have accordingly amended claims 27-29 correctly to depend from independent claim 26. Applicants respectfully submit that this amendment adds no new matter to the claims and places the claims in condition for allowance.

Claims 1-14, 17-20, 23-26, and 31-32 Stand Rejected Under 35 U.S.C. § 102 Over Farris

Claims 1-14, 17-20, 23-26, and 31-32 stand rejected under 35 U.S.C § 102(e) as being anticipated by Farris. To anticipate claims 1-14, 17-20, 23-26, and 31-32 under 35 U.S.C. § 102(e), Farris must disclose each and every element and limitation recited in the claims of the present application. As explained below, Farris does not disclose each and every element and limitation recited in the claims of the present application and therefore does not anticipate claims of the present application.

Farris Does Not Disclose Each and Every Element Of The Claims Of The Present Application

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As explained in more detail below, Farris does not disclose each and every element of claims 1, 13, 31, or 32, and Farris therefore cannot be said to anticipate the claims of the present application within the meaning of 35 USC § 102(e).

Farris Does Not Disclose Each and Every Element Of Claim 1 Of The Present Application

As explained in detail below, Farris does not disclose each and every element and limitation recited in claim 1 of the present application and therefore does not anticipate claim 1 of the present application. Independent claim 1 recites:

> A method for specifying telephone services for a particular caller, comprising:
>
> detecting a call initiation condition from an origin device at a trusted telephone network;
>
> brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service; and
>
> responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity.

Farris Does Not Disclose Detecting A Call Initiation Condition From An Origin Device At A Trusted Telephone Network

The Office Action takes the position that Farris at column 18, lines 8-14, discloses the first element of claim 1: detecting a call initiation condition from an origin device at a trusted telephone network. Applicants respectfully note in response, however, that what Farris at column 18, lines 8-14, in fact discloses is:

> Assume use of a standard telephone for purposes of this example. The person lifts the handset creating an off-hook state in the telephone 1A, and a corresponding signal or change in state on the line to the central office 11 (step S1). In this call flow, the off-hook signal is a type of service request, i.e. a request to make an outgoing call. The serving central office 11.sub.1 detects the off-hook and commences its call processing.

That is, Farris at column 18, lines 8-14, discloses a person lifting the handset creating an off-hook state in the telephone and a corresponding change in state on the line to the central office. Farris's person lifting the handset creating an off-hook state in the telephone and a corresponding change in state on the line to the central office does not disclose detecting a call initiation condition from an origin device at a trusted telephone network. Farris does not disclose at this reference point or any other 'a trusted network' as claimed in the present application. Farris's 'public switched telephone network' disclosed at column 2, lines 3-5, is not a trusted network as claimed in the present application. In fact, Farris does not even mention the terms 'trust' or 'trusted network' at any point. It cannot be said then that Farris discloses a trusted network as claimed here. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn

Farris Does Not Disclose Brokering A Connection Between Said Origin Device And An External Server Enabled To Perform A Caller Identity Authentication Service

The Office Action takes the position that Farris at column 18, line 22 – column 19, line 5, discloses the second element of claim 1: brokering a connection between said origin

device and an external server enabled to perform a caller identity authentication service. Applicants respectfully note in response, however, that what Farris at column 18, line 22 – column 19, line 5, in fact discloses is:

> In response to the off-hook and the off-hook trigger set in the subscriber's profile, the SSP type central office switch 11.sub.1 launches a query to the SCP 19 (step S3). Specifically, the SSP 11.sub.1 creates a TCAP query message containing relevant information, such as the office equipment (OE) number assigned to the off-hook line, and transmits that query over an SS7 link to one of the STPs 15. The query includes a destination point code and/or a global title translation addressing the message to the SCP 19, and the STP 15 relays the query message over the appropriate link to the SCP 19. The query from the SSP central office 11.sub.1 identifies the caller's line by its associated office equipment (OE) number and possibly by a single telephone number associated with the off-hook line.
>
> In response to a query, the SCP 19 accesses its a database, typically, the MSAP database set up in the ISCP, to determine how to process the particular call. The SCP 19 identifies an access key in the query and uses the key to retrieve the appropriate record from the database. In this case, the query indicates an off-hook trigger as the trigger event, therefore the SCP 19 uses the calling party office equipment (OE) number as the access key. The SCP 19 retrieves a call processing record (CPR) corresponding to the office equipment (OE) number associated with the off-hook line and proceeds in accord with that CPR (step S4).
>
> For the present example of the personal dial tone service, the CPR will provide information necessary for routing the call to some node of the network that will perform speaker identification/verification (SIV). In the preferred embodiment, the SIV is a function performed by an Intelligent Peripheral (IP), therefore the CPR provides information for routing the call to the nearest available IP having the SIV capability.
>
> Based on the CPR, the SCP 19 formulates a response message instructing the SSP central office 11.sub.1 serving the customer to route the call. In this case, the message includes information, e.g. a office equipment (OE) number or telephone number, used for routing a call to the identified IP 23. The SCP 19 formulates a TCAP message in SS7 format, with the destination point code identifying the SSP office 11.sub.1. The SCP 19 transmits the TCAP response message back over the SS7 link to the STP 15, and the STP 15 in turn routes the TCAP message to the SSP central office 11.sub.1 (see step S5)

> The SSP type switch in the central office 11.sub.1 uses the routing information to connect the call to one of the lines or channels to the IP 23. A two-way voice grade call connection now extends between the calling station 1.sub.A and the IP 23 (step S6) . In the present example, the switch actually connects the off-hook line to the line to the IP before providing dial tone.

That is, Farris at column 18, line 22 – column 19, line 5, discloses a CPR (call processing record) that provides information necessary for routing a call to some node of the network that will perform speaker identification/verification. Farris's CPR that provides information necessary for routing a call to some node of the network that will perform speaker identification/verification does not disclose brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service as claimed in the present application. Farris does not disclose here, or at any other reference point, 'an external server enabled to perform a caller identity authentication service' as claimed in the present application. In fact, at this reference point, Farris teaches away from Applicants' claimed invention by teaching "routing the call to some node *of the network* that will perform speaker identification/verification." Farris's routing a call to some node of the network teaches directly away from *an external server* enabled to perform a caller identity authentication service as claimed in the present application. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Farris Does Not Disclose Responsive To Receiving, From Said External Server, An Authenticated Caller Identity Of A Caller Utilizing Said Origin Device, Specifying Services Available To Said Caller According To Said Authenticated Caller Identity

The Office Action takes the position that Farris at column 20, lines 6-49, discloses the third element of claim 1: responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity. Applicants

respectfully note in response, however, that what Farris at column 20, lines 6-49, in fact discloses is:

> In step S13, the IP 23 determines if the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber (within some threshold level of certainty). If there is a match, the IP now knows the identity of the calling subscriber. Based on the identification of the calling subscriber, the IP 23 selects a virtual office equipment (OE) number from storage that corresponds to the subscriber.
>
> The IP 23 formulates a D-channel signaling message containing the virtual office equipment (OE) number together with an instruction to load that OE number into the register assigned to the call in place of the OE number of the off-hook line. The IP 23 supplies the message to the SSP central office switch 11.sub.1 over the D-channel of the ISDN PRI link (step S14). In response, the administrative module processor 61 rewrites the OE number in the register assigned to the call using the OE number received from the IP 23.
>
> Upon rewriting the OE number in the register, the administrative module processor 61 of central office switch 11.sub.1 also reloads the profile information in the register (step S15). Specifically, the administrative module processor 61 retrieves profile information associated with the virtual office equipment (OE) number from the disc storage 63 into the register. As such, the profile information in the assigned register in the call store 67 now corresponds to the identified subscriber, rather than to the off-hook line.
>
> The profile information provides a wide range of data relating to the subscriber's services. The profile data provides necessary billing information, enabling billing from the call to this particular subscriber. The profile also defines various service features available to this subscriber on outgoing calls, such as three-way calling. The profile may define a class of calling service available to the subscriber. In the dormitory example, the caller may be allowed a set dollar amount for long distance calls per month (e.g. $50.00). The profile data will indicate the remaining amount at the time of the call and will cause the switch to interrupt service when the available amount is exhausted. Other class of service restrictions might enable long distance calls only if collect and/or only if calling one or two specified numbers (e.g. only to the parent's house). The class of service might enable only long distance calls within a region or country but not international calls.

That is, Farris at column 20, lines 6-49, discloses the administrative module processor that retrieves profile information associated with the virtual office equipment number. Farris's administrative module processor that retrieves profile information associated with the virtual office equipment number does not disclose responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity as claimed in the present application. As explained above, Farris does not disclose an *external server*, as claimed in the present application, but instead teaches at column 18, lines 57-55, an intelligent peripheral as a "node of the network that will perform speaker identification/verification," that is, a node of the *same* network. Because Farris does not disclose an external server as claimed here, Farris cannot be said to disclose, responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity as claimed in the present application. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Farris Does Not Disclose Each and Every Element Of Claim 13 Of The Present Application

As explained in detail below, Farris does not disclose each and every element and limitation recited in claim 13 of the present application and therefore does not anticipate claim 13 of the present application. Independent claim 13 recites:

> A method for informing a callee of a caller identity, comprising:
>
> detecting a call initiation condition from an origin device at a trusted telephone network;

brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service; and

responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, transferring said authenticated caller identity to a destination device, such that a callee receiving said call at said destination device is provided with an identity of a party originating said call.

Farris Does Not Disclose Detecting A Call Initiation Condition From An Origin Device At A Trusted Telephone Network

The Office Action takes the position that Farris at column 18, lines 8-14, discloses the first element of claim 13: detecting a call initiation condition from an origin device at a trusted telephone network. Applicants respectfully note in response, however, that what Farris at column 18, lines 8-14, in fact discloses is:

> Assume use of a standard telephone for purposes of this example. The person lifts the handset creating an off-hook state in the telephone 1A, and a corresponding signal or change in state on the line to the central office 11 (step S1). In this call flow, the off-hook signal is a type of service request, i.e. a request to make an outgoing call. The serving central office 11.sub.1 detects the off-hook and commences its call processing.

That is, Farris at column 18, lines 8-14, discloses a person lifting the handset creating an off-hook state in the telephone, and a corresponding change in state on the line to the central office. Farris's person lifting the handset creating an off-hook state in the telephone, and a corresponding change in state on the line to the central office does not disclose detecting a call initiation condition from an origin device at a trusted telephone network. Farris does not disclose at this reference point or any other 'a trusted network' as claimed in the present application. Farris's 'public switched telephone network' disclosed at column 2, lines 3-5, is not a trusted network as claimed in the present application. In fact, Farris does not even mention the terms 'trust' or 'trusted network' at any point. It cannot be said then that Farris discloses a trusted network as claimed here.

Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Farris Does Not Disclose Brokering A Connection Between Said Origin Device And An External Server Enabled To Perform A Caller Identity Authentication Service

The Office Action takes the position that Farris at column 18, line 22 – column 19, line 5, discloses the second element of claim 13: brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service. Farris at column 18, line 22 – column 19, line 5, quoted above, discloses a CPR (call processing record) that provides information necessary for routing a call to some node of the network that will perform speaker identification/verification. Farris's CPR that provides information necessary for routing a call to some node of the network that will perform speaker identification/verification does not disclose brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service as claimed in the present application. Farris does not disclose here, or at any other reference point, 'an external server enabled to perform a caller identity authentication service' as claimed in the present application. In fact, at this reference point, Farris teaches away from Applicants' claimed invention by teaching "routing the call to some node *of the network* that will perform speaker identification/verification." Farris's "node of the network" clearly refers to a node of the *same* network, teaching away from *an external server* enabled to perform a caller identity authentication service as claimed in the present application. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Farris Does Not Disclose Responsive To Receiving, From Said External Server, An Authenticated Caller Identity Of A Caller Utilizing Said Origin Device, Transferring Said Authenticated Caller Identity To A Destination Device, Such That A Callee Receiving Said Call At Said Destination Device Is Provided With An Identity Of A Party Originating Said Call

The Office Action takes the position that Farris at column 20, lines 6-32, and column 21, line 53- column 22, line 18, discloses the third element of claim 13: responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing

said origin device, transferring said authenticated caller identity to a destination device, such that a callee receiving said call at said destination device is provided with an identity of a party originating said call. Applicants respectfully note in response, however, that what Farris at column 20, lines 6-32, in fact discloses is:

> In step S13, the IP 23 determines if the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber (within some threshold level of certainty). If there is a match, the IP now knows the identity of the calling subscriber. Based on the identification of the calling subscriber, the IP 23 selects a virtual office equipment (OE) number from storage that corresponds to the subscriber.
>
> The IP 23 formulates a D-channel signaling message containing the virtual office equipment (OE) number together with an instruction to load that OE number into the register assigned to the call in place of the OE number of the off-hook line. The IP 23 supplies the message to the SSP central office switch 11.sub.1 over the D-channel of the ISDN PRI link (step S14). In response, the administrative module processor 61 rewrites the OE number in the register assigned to the call using the OE number received from the IP 23.
>
> Upon rewriting the OE number in the register, the administrative module processor 61 of central office switch 11.sub.1 also reloads the profile information in the register (step S15). Specifically, the administrative module processor 61 retrieves profile information associated with the virtual office equipment (OE) number from the disc storage 63 into the register. As such, the profile information in the assigned register in the call store 67 now corresponds to the identified subscriber, rather than to the off-hook line.

In Addition, what Farris at column 21, line 53- column 22, line 18, in fact discloses is:

> When the terminating office 11.sub.N receives the IAM message, the administrative module processor for that office retrieves the customer profile for the number in the destination number field of that message (e.g. the number for the telephone 1.sub.B) from its mass storage system and loads that profile into one of its call store registers. If the called party has an enhanced caller ID service, with name display, the terminating central office 11.sub.N would normally recognize the attempt to complete to that party's number message as a terminating attempt trigger (TAT) type point in call (PIC) to trigger access to the LIDB database for name information.

> However, in this embodiment of the invention, the terminating end office detects the receipt of the subscriber's name data with the IAM message, therefore the administrative module processor in that office overrides the trigger.
>
> The terminating central office switching system 11.sub.N transmits an Address Complete Message (ACM) back to the central office 11.sub.1 and if the called line is available applies ringing signal to the called party's line (S182). The ACM includes a variety of information, including a calling party status indicator, e.g. line free or busy. If the line is not busy, the end office 13 rings the station Y corresponding to the dialed digits 703-333-5678, and generates the appropriate indicator in the Address Complete Message (ACM) to indicate that it received the request for a call and that the number is not busy. The ACM message is sent back by simply reversing the point codes from the IAM message. Now the destination point code (DPC) is the point code of the central office 11, and the origination point code (OPC) is the point code of the central office 13. In response to the ACM message, if the called line is available, the originating central office 11 applies a ringback tone signal to the line to the calling station 1.sub.A (S183).

That is, Farris at these reference points discloses the administrative module processor retrieves profile information associated with the virtual office equipment number. Farris's administrative module processor that retrieves profile information associated with the virtual office equipment number does not disclose responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, transferring said authenticated caller identity to a destination device, such that a callee receiving said call at said destination device is provided with an identity of a party originating said call. Farris does not disclose at this reference point or any other, an external server as claimed in the present application, but instead teaches at column 18, lines 57-55, an intelligent peripheral as a "node of the network that will perform speaker identification/verification." Again, Farris's "node of the network," clearly referring to a node of the *same* network, cannot be said to teach an *external* server as claimed here. Because Farris does not disclose an external server as claimed here Farris cannot be said to disclose, responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, transferring said authenticated caller identity to a destination device, such that a callee receiving said call at said destination device is provided with an identity of a party originating said call as claimed in the

present application. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Farris Does Not Disclose Each and Every Element Of Claim 31 Of The Present Application

As explained in detail below, Farris does not disclose each and every element and limitation recited in claim 31 of the present application and therefore does not anticipate claim 31 of the present application. Independent claim 31 recites:

> A method for controlling caller identification, comprising:
>
> receiving, from a trusted telephone network, an authenticated caller identity for a caller at a telephony device, wherein said caller identity is authenticated at a authentication service accessible via a network external to said trusted telephone network, wherein said trusted telephone network initiates said authentication service; and
>
> controlling output of said authenticated caller identity from said telephony device, such that an individual with access to said telephony device is informed of the identity of said caller.

Farris Does Not Disclose Receiving, From A Trusted Telephone Network, An Authenticated Caller Identity For A Caller At A Telephony Device, Wherein Said Caller Identity Is Authenticated At A Authentication Service Accessible Via A Network External To Said Trusted Telephone Network, Wherein Said Trusted Telephone Network Initiates Said Authentication Service

The Office Action takes the position that Farris at column 18, line 48 – column 20, line 23, discloses the first element of claim 31: receiving, from a trusted telephone network, an authenticated caller identity for a caller at a telephony device, wherein said caller identity is authenticated at a authentication service accessible via a network external to

said trusted telephone network, wherein said trusted telephone network initiates said authentication service. Applicants respectfully note in response, however, that what Farris at column 18, line 48 – column 20, line 23, in fact discloses is:

> For the present example of the personal dial tone service, the CPR will provide information necessary for routing the call to some node of the network that will perform speaker identification/verification (SIV). In the preferred embodiment, the SIV is a function performed by an Intelligent Peripheral (IP), therefore the CPR provides information for routing the call to the nearest available IP having the SIV capability.
>
> Based on the CPR, the SCP 19 formulates a response message instructing the SSP central office 11.sub.1 serving the customer to route the call. In this case, the message includes information, e.g. a office equipment (OE) number or telephone number, used for routing a call to the identified IP 23. The SCP 19 formulates a TCAP message in SS7 format, with the destination point code identifying the SSP office 11.sub.1. The SCP 19 transmits the TCAP response message back over the SS7 link to the STP 15, and the STP 15 in turn routes the TCAP message to the SSP central office 11.sub.1 (see step S5)
>
> The SSP type switch in the central office 11.sub.1 uses the routing information to connect the call to one of the lines or channels to the IP 23. A two-way voice grade call connection now extends between the calling station 1.sub.A and the IP 23 (step S6) . In the present example, the switch actually connects the off-hook line to the line to the IP before providing dial tone.
>
> As noted above, the communication link to the IP 23 provides both line connections and signaling, preferably over a primary rate interface (PRI) type ISDN link. When the central office 11.sub.1 extends the call from the calling party's line to a line circuit (over a B channel) to the IP 23, the switch in that office also provides call related data over the signaling link (D channel for ISDN). The call related data, for example, includes the office equipment (OE) number normally associated with the off-hook line and possibly the telephone number for that line.
>
> In response to the incoming call, the IP 23 will seize the line, and it will launch its own query to the SCP 19 (step S7). In the preferred network illustrated in FIG. 1, the IP 23 and the SCP 19 communicate with each other via a separate second signalling network 27, for example utilizing either an 1129+ protocol or a generic data interface (GDI) protocol as discussed in U.S. Pat. No. 5,572,583 to Wheeler, Jr. et al. The query from

the IP 23 again identifies the caller's line by at least its associated office equipment (OE) number.

In response to the query from the IP 23, the SCP 19 again accesses the appropriate CPR (step S8) and provides a responsive instruction back through the network 27 to the IP 23 (step S9). Although the IP 23 could passively monitor any speech that the user might utter, the preferred implementation utilizes a `Challenge Phase` to prompt the user to input specific identifying information. In this case, the instruction causes the IP 23 to provide a prompt message over the connection to the caller (step S10). Here, the signal to the caller may be a standard dial tone or any other appropriate audio signal. Preferably, the instruction from the SCP 19 causes the IP 23 to provide an audio announcement prompting the caller to speak personal information. In one preferred example, in step S10 the IP plays an audio prompt message asking the caller, `Please say your full name`. The process may ask for any appropriate identifying information.

The signal received by the IP 23 goes over the lines and through the central office switch(es) for presentation via the off-hook telephone 1.sub.A to the calling party. In response, the caller will speak identifying information into their off-hook telephone, and the network will transport the audio signal to the IP 23 (step S11).

As noted above, an IP 23 can provide a wide range of call processing functions, such as message playback and digit collection. In the preferred system, the IP also performs speaker identification/verification (SIV) on the audio signal received from the off-hook telephone in step S11. When the IP 23 receives speech input information during actual call processing, for this service example, the IP analyzes the speech to extract certain characteristic information (step S12).

The IP 23 stores a template or other voice pattern information for each person who has the personalized service in the area that the IP normally services. If the IP 23 does not store the particular template or feature information it needs to process a call, the IP 23 can communicate with a remote IP 23.sub.R to obtain that information. In the present shared line example, the IP 23 will store template or feature data for each subscriber associated with the particular off-hook line.

When the IP 23 receives input speech and extracts the characteristic information during actual call processing, the IP compares the extracted speech information to stored pattern information, to identity and authenticate the particular caller. In the present example, the voice authentication module 233 in the IP 23 compares the extracted speech information to the stored template or feature data for each subscriber associated with the particular off-hook line.

> In step S13, the IP 23 determines if the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber (within some threshold level of certainty). If there is a match, the IP now knows the identity of the calling subscriber. Based on the identification of the calling subscriber, the IP 23 selects a virtual office equipment (OE) number from storage that corresponds to the subscriber.
>
> The IP 23 formulates a D-channel signaling message containing the virtual office equipment (OE) number together with an instruction to load that OE number into the register assigned to the call in place of the OE number of the off-hook line. The IP 23 supplies the message to the SSP central office switch 11.sub.1 over the D-channel of the ISDN PRI link (step S14). In response, the administrative module processor 61 rewrites the OE number in the register assigned to the call using the OE number received from the IP 23.

That is, Farris at column 18, line 48 – column 20, line 23, discloses routing a call to the identified Intelligent Peripheral (IP) that determines whether the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber. Farris's routing of a call to the identified IP that determines whether the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber does not disclose receiving, from a trusted telephone network, an authenticated caller identity for a caller at a telephony device, wherein said caller identity is authenticated at a authentication service accessible via a network external to said trusted telephone network, wherein said trusted telephone network initiates said authentication service. Farris does not disclose at this reference point or any other reference point "a trusted telephone network" as claimed here and as such cannot be said to disclose "receiving, from a trusted telephone network, an authenticated caller identity." Furthermore, Farrris does not disclose "a authentication service accessible via a network external to said trusted telephone network" as claimed here. In fact, Farris's authentication is taught as occurring in the intelligent peripheral which is a node of Farris's network. Because Farris does not disclose "a trusted telephone network" or "a authentication service accessible via a network external to said trusted telephone network," it cannot be said that Farris discloses receiving, from a trusted telephone network, an authenticated caller identity for a caller at a telephony

device, wherein said caller identity is authenticated at a authentication service accessible via a network external to said trusted telephone network, wherein said trusted telephone network initiates said authentication service as claimed here. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn

Farris Does Not Disclose Controlling Output Of Said Authenticated Caller Identity From Said Telephony Device, Such That An Individual With Access To Said Telephony Device Is Informed Of The Identity Of Said Caller

The Office Action takes the position that Farris at column 24, lines 50-65, discloses the second element of claim 31: controlling output of said authenticated caller identity from said telephony device, such that an individual with access to said telephony device is informed of the identity of said caller. Applicants respectfully note in response, however, that what Farris at column 24, lines 50-65, in fact discloses is:

> Returning to step S13 in FIG. 4A, the extracted information characterizing the input speech signals may not match any of the templates or feature data used by the IP 23. In this event, the process flows to step S19. The IP will count the number of tries or attempts to identify the subscriber and permit some maximum number of failed attempts (N). Assume, for example, that the software allows only two identification attempts on one call (N=2). On the first failure, the number of tries is less than N, therefore processing returns to step S10, and the IP 23 again transmits the prompt for speech input. The caller again speaks the requested input information (S11), and the authentication module 233 again analyzes the input information (S12). If the second input adequately matches a stored subscriber's information in step S13, the processing flows through steps S14 to S18 to complete the call as described above.

That is, Farris at column 24, lines 50-65, discloses the intelligent peripheral (IP) will count the number of tries or attempts to identify the subscriber and permit some maximum number of failed attempts Farris's IP that will count the number of tries or attempts to identify the subscriber and permit some maximum number of failed attempts does not disclose controlling output of said authenticated caller identity from said

telephony device, such that an individual with access to said telephony device is informed of the identity of said caller as claimed in the present application. Farris does not disclose at this reference point anything resembling informing controlling output of an authenticated caller identity as claimed here. Farris's at this reference point is only concerned with a maximum number of attempts to login and controlling the output of an authenticated caller identity from said telephony device as claimed here. Farris therefore cannot be said to disclose controlling output of said authenticated caller identity from said telephony device, such that an individual with access to said telephony device is informed of the identity of said caller. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn

Farris Does Not Disclose Each and Every Element Of Claim 32 Of The Present Application

As explained in detail below, Farris does not disclose each and every element and limitation recited in claim 32 of the present application and therefore does not anticipate claim 32 of the present application. Independent claim 31 recites:

> A method for controlling a call, comprising:
>
> receiving, at a telephony device, a secure communication channel via a trusted telephone network to an authentication service, wherein said trusted telephone network initiates said authentication service; and
>
> facilitating, from said telephony device, communications between said authentication service and a caller, such that said authentication service is enabled to authenticate an identity of said caller.

Farris Does Not Disclose Receiving, At A Telephony Device, A Secure Communication Channel Via A Trusted Telephone Network To An Authentication Service, Wherein Said Trusted Telephone Network Initiates Said Authentication Service

The Office Action takes the position that Farris at column 18, line 48 – column 19, line 24 and column 20, lines 6-23, discloses the first element of claim 32: receiving, at a telephony device, a secure communication channel via a trusted telephone network to an authentication service, wherein said trusted telephone network initiates said authentication service. Applicants respectfully note in response, however, that what Farris at column 18, line 48 – column 19, line 24, in fact discloses is:

> For the present example of the personal dial tone service, the CPR will provide information necessary for routing the call to some node of the network that will perform speaker identification/verification (SIV). In the preferred embodiment, the SIV is a function performed by an Intelligent Peripheral (IP), therefore the CPR provides information for routing the call to the nearest available IP having the SIV capability.
>
> Based on the CPR, the SCP 19 formulates a response message instructing the SSP central office 11.sub.1 serving the customer to route the call. In this case, the message includes information, e.g. a office equipment (OE) number or telephone number, used for routing a call to the identified IP 23. The SCP 19 formulates a TCAP message in SS7 format, with the destination point code identifying the SSP office 11.sub.1. The SCP 19 transmits the TCAP response message back over the SS7 link to the STP 15, and the STP 15 in turn routes the TCAP message to the SSP central office 11.sub.1 (see step S5)
>
> The SSP type switch in the central office 11.sub.1 uses the routing information to connect the call to one of the lines or channels to the IP 23. A two-way voice grade call connection now extends between the calling station 1.sub.A and the IP 23 (step S6) . In the present example, the switch actually connects the off-hook line to the line to the IP before providing dial tone.
>
> As noted above, the communication link to the IP 23 provides both line connections and signaling, preferably over a primary rate interface (PRI) type ISDN link. When the central office 11.sub.1 extends the call from the calling party's line to a line circuit (over a B channel) to the IP 23, the switch in that office also provides call related data over the signaling link

> (D channel for ISDN). The call related data, for example, includes the office equipment (OE) number normally associated with the off-hook line and possibly the telephone number for that line.
>
> In response to the incoming call, the IP 23 will seize the line, and it will launch its own query to the SCP 19 (step S7). In the preferred network illustrated in FIG. 1, the IP 23 and the SCP 19 communicate with each other via a separate second signalling network 27, for example utilizing either an 1129+ protocol or a generic data interface (GDI) protocol as discussed in U.S. Pat. No. 5,572,583 to Wheeler, Jr. et al. The query from the IP 23 again identifies the caller's line by at least its associated office equipment (OE) number.

In addition, what Farris at column 20, lines 6-23, actually discloses is:

> In step S13, the IP 23 determines if the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber (within some threshold level of certainty). If there is a match, the IP now knows the identity of the calling subscriber. Based on the identification of the calling subscriber, the IP 23 selects a virtual office equipment (OE) number from storage that corresponds to the subscriber.
>
> The IP 23 formulates a D-channel signaling message containing the virtual office equipment (OE) number together with an instruction to load that OE number into the register assigned to the call in place of the OE number of the off-hook line. The IP 23 supplies the message to the SSP central office switch 11.sub.1 over the D-channel of the ISDN PRI link (step S14). In response, the administrative module processor 61 rewrites the OE number in the register assigned to the call using the OE number received from the IP 23.

That is, what Farris discloses at these reference points is that the CPR will provide information necessary for routing the call to some node of the network that will perform speaker identification/verification. Farris's CPR that will provide information necessary for routing the call to some node of the network that will perform speaker identification/verification does not disclose receiving, at a telephony device, a secure communication channel via a trusted telephone network to an authentication service, wherein said trusted telephone network initiates said authentication service as claimed in the present application. Farris, as explained in detail above, does not disclose a trusted

network as claimed in the present application. The 'network' disclosed at these reference points in Farris is not taught by Farris as a trusted network. Farris therefore cannot be said to disclose receiving, at a telephony device, a secure communication channel via *a trusted telephone network* to an authentication service, wherein said *trusted telephone network* initiates said authentication service as claimed in the present application. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Farris Does Not Disclose Facilitating, From Said Telephony Device, Communications Between Said Authentication Service And A Caller, Such That Said Authentication Service Is Enabled To Authenticate An Identity Of Said Caller

The Office Action takes the position that Farris at column 19, line 25 – column 20, line 14, discloses the second element of claim 32: facilitating, from said telephony device, communications between said authentication service and a caller, such that said authentication service is enabled to authenticate an identity of said caller. Applicants respectfully note in response, however, that what Farris at column 19, line 25 – column 20, line 14, in fact discloses is:

> The SSP type switch in the central office 11.sub.1 uses the routing information to connect the call to one of the lines or channels to the IP 23. A two-way voice grade call connection now extends between the calling station 1.sub.A and the IP 23 (step S6) . In the present example, the switch actually connects the off-hook line to the line to the IP before providing dial tone.
>
> As noted above, the communication link to the IP 23 provides both line connections and signaling, preferably over a primary rate interface (PRI) type ISDN link. When the central office 11.sub.1 extends the call from the calling party's line to a line circuit (over a B channel) to the IP 23, the switch in that office also provides call related data over the signaling link (D channel for ISDN). The call related data, for example, includes the office equipment (OE) number normally associated with the off-hook line and possibly the telephone number for that line.
>
> In response to the incoming call, the IP 23 will seize the line, and it will launch its own query to the SCP 19 (step S7). In the preferred network

illustrated in FIG. 1, the IP 23 and the SCP 19 communicate with each other via a separate second signalling network 27, for example utilizing either an 1129+ protocol or a generic data interface (GDI) protocol as discussed in U.S. Pat. No. 5,572,583 to Wheeler, Jr. et al. The query from the IP 23 again identifies the caller's line by at least its associated office equipment (OE) number.

In response to the query from the IP 23, the SCP 19 again accesses the appropriate CPR (step S8) and provides a responsive instruction back through the network 27 to the IP 23 (step S9). Although the IP 23 could passively monitor any speech that the user might utter, the preferred implementation utilizes a `Challenge Phase` to prompt the user to input specific identifying information. In this case, the instruction causes the IP 23 to provide a prompt message over the connection to the caller (step S10). Here, the signal to the caller may be a standard dial tone or any other appropriate audio signal. Preferably, the instruction from the SCP 19 causes the IP 23 to provide an audio announcement prompting the caller to speak personal information. In one preferred example, in step S10 the IP plays an audio prompt message asking the caller, `Please say your full name`. The process may ask for any appropriate identifying information.

The signal received by the IP 23 goes over the lines and through the central office switch(es) for presentation via the off-hook telephone 1.sub.A to the calling party. In response, the caller will speak identifying information into their off-hook telephone, and the network will transport the audio signal to the IP 23 (step S11).

As noted above, an IP 23 can provide a wide range of call processing functions, such as message playback and digit collection. In the preferred system, the IP also performs speaker identification/verification (SIV) on the audio signal received from the off-hook telephone in step S11. When the IP 23 receives speech input information during actual call processing, for this service example, the IP analyzes the speech to extract certain characteristic information (step S12).

The IP 23 stores a template or other voice pattern information for each person who has the personalized service in the area that the IP normally services. If the IP 23 does not store the particular template or feature information it needs to process a call, the IP 23 can communicate with a remote IP 23.sub.R to obtain that information. In the present shared line example, the IP 23 will store template or feature data for each subscriber associated with the particular off-hook line.

When the IP 23 receives input speech and extracts the characteristic information during actual call processing, the IP compares the extracted speech information to stored pattern information, to identity and

> authenticate the particular caller. In the present example, the voice authentication module 233 in the IP 23 compares the extracted speech information to the stored template or feature data for each subscriber associated with the particular off-hook line.
>
> In step S13, the IP 23 determines if the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber (within some threshold level of certainty). If there is a match, the IP now knows the identity of the calling subscriber. Based on the identification of the calling subscriber, the IP 23 selects a virtual office equipment (OE) number from storage that corresponds to the subscriber.

That is, Farris at column 19, line 25 – column 20, line 14, discloses that in response to the query from the IP, the SCP again accesses the appropriate CPR and provides a responsive instruction back through the network to the IP. Farris's response to the query from the IP, the SCP again accesses the appropriate CPR and provides a responsive instruction back through the network to the IP does not disclose facilitating, from said telephony device, communications between said authentication service and a caller, such that said authentication service is enabled to authenticate an identity of said caller as claimed in the present application. In fact, Farris does not disclose "communications between said authentication service and a caller" as claimed here. Farris only discloses at column 19, lines 1-5, connection between the calling station and the IP. Furthermore, Farris does not disclose "facilitating, from said telephony device, communications" as claimed here. Farris' SCP access the appropriate CPR which is not "facilitating, from said telephony device, communications" as claimed here. Because Farris does not disclose "communications between said authentication service and a caller" or "facilitating, from said telephony device, communications" as claimed here, Farris cannot be said to disclose facilitating, from said telephony device, communications between said authentication service and a caller, such that said authentication service is enabled to authenticate an identity of said caller as claimed in the present application. Because Farris does not disclose each and every element and limitation of Applicants' claims, Farris does not anticipate Applicants' claims, and the rejections under 35 USC § 102(e) should be withdrawn.

Claims 15-16, 21-22, And 27-28 Stand Rejected Under 35 U.S.C. § 103 Over Farris In View Of Rozenblit

Claims 15-16, 21-22, and 27-28 stand rejected for obviousness under 35 U.S.C. § 103(a) as being unpatentable over Farris in view of Rozenblit. To establish a prima facie case of obviousness, the proposed combination of the references must teach or suggest all of the claim limitations of dependent claims 15-16, 21-22, and 27-28. *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974). Dependent claims 15-16, 21-22, and 27-28, depend from independent claims 13, 19, and 25, and include all the limitations of the independent claims from which they depend. In rejecting dependent claims 15-16, 21-22, and 27-28, the Office Action relies on Farris as disclosing each and every element of independent claims 13, 19, and 25. As Applicants have demonstrated above, Farris in fact does not disclose each and every element of independent claims 13, 19, and 25. Because the proposed combination relies on the argument that Farris discloses each and every element of claims 13, 19, and 25 and because Farris in fact does not disclose each and every element of claims 13, 19, and 25, the proposed combination cannot teach or suggest all the claim limitations of dependent claims 15-16, 21-22, and 27-28. The proposed combination, therefore, cannot establish a prima facie case of obviousness, and the rejections should be withdrawn.

Relations Among Claims

Independent claims 7 and 12 are system and computer program product claims for specifying telephone services for a particular caller corresponding to independent method claim 1 that include "means for" and "means, recorded on [a] recording medium, for:" specifying telephone services for a particular caller. Independent claims 19 and 25 are system and computer program product claims for informing a callee of a caller identity corresponding to independent method claim 13 that include "means for" and "means, recorded on [a] recording medium, for:" informing a callee of a caller identity. As discussed above, Farris does not disclose each and every claim limitation of claims 1 or 13. Therefore, for the same reason that Farris does not disclose or enable the methods of claims 1 and 13, Farris also does not disclose or enable systems and computer program

products of claims 7, 12, 19 and 25, corresponding to independent method claims 1 and 13. Independent claims 7, 12, 19 and 25 are therefore patentable and should be allowed.

Claims 2-6 and 8-11 depend respectively from independent claims 1 and 7. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because Farris does not disclose or enable each and every element of the independent claims, Farris does not disclose or enable each and every element of the dependent claims of the present application. As such, claims 2-6 and 8-11 are also patentable and should be allowed.

Claims 14-18, 20-24, and 26-30 depend respectively from independent claims 13, 19 and 25. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because Farris does not disclose or enable each and every element of the independent claims, Farris does not disclose or enable each and every element of the dependent claims of the present application. As such, claims 14-18, 20-24, and 26-30 are also patentable and should be allowed.

Conclusion

Claim 31 stands rejected under 35 U.S.C. § 112 for failing to comply with the enablement requirement. Claim 31 satisfies the enablement requirement of 35 U.S.C. § 112, first paragraph, because one reasonably skilled in the art could make or use the invention of claim 31 from the disclosure coupled with information known in the art without undue experimentation. Claim 31 is therefore patentable and should be allowed. Applicants respectfully request reconsideration of claim 31.

Claims 27-29 stand rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 27-29 has been amended to cure the rejection under 35 U.S.C. § 112. Claims 27-29 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claim 27-29.

Claims 1-14, 17-20, 23-26, and 31-32 stand under 35 U.S.C § 102 as being anticipated by Farris. Farris does not disclose each and every element of Applicants' claims. Farris therefore do not anticipate Applicants' claims. Claims 1-14, 17-20, 23-26, and 31-32 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claims 1-14, 17-20, 23-26, and 31-32.

Claims 15-16, 21-22, and 27-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Farris in view of Rozenblit. The combination of Farris and Rozenblit does not teach or suggest each and every element of Applicants' claims. Claims 15-16, 21-22, and 27-28 are therefore patentable and should be allowed. Applicants respectfully request reconsideration of claims 15-16, 21-22, and 27-28.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

Date: October 2, 2006 By:

H. Artoush Ohanian
Reg. No. 46,022
Biggers & Ohanian, LLP
P.O. Box 1469
Austin, Texas 78767-1469
Tel. (512) 472-9881
Fax (512) 472-9887
ATTORNEY FOR APPLICANTS